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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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PAUL J ESATTO
SCULLY SCOTT MURPHY & PRESSER
400 GARDEN CITY PLAZA
GARDEN CITY NY 11530

EXAMINER

DI LORENZO, A

ART UNIT

PAPER NUMBER

2766

DATE MAILED:

08/14/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

11-15
The authorized me to
file response w/ 1 EOT
containing legal arguments
on no motivation to continue
TS

Office Action Summary

Application No.

09/294,956

Applicant(s)

COX ET AL.

Examiner

Anthony DiLorenzo

Art Unit

2766

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2000.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-16, 18-41, 47-49, 51-62, 64-87, and 108-134 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-16, 18-41, 47-49, 51-62, 64-87, and 108-134 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☒ The proposed drawing correction filed on 15 May 2000 is: a) ☒ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) _____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

RESPONSE TO AMENDMENT AND REMARKS

5 This Office Action is written in response to the amendment and remarks filed on 5/15/00 in US Patent Application Serial No. 09/294,956. Claims 1-3, 5-16, 18-41, 47-49, 51-62, 64-87, and 108-134 have been examined on the merits in light of the presented responses. The relevant sections of U. S. Code have been cited in the previous office action and do not appear in this communication.

10 **Error in the Previous Office Action**

15 Examiner has noted that the previous office action did not contain page numbers, and regrets this oversight. Clarification is necessary at this point since pages of that office action will be cited in this action. Please note that the Office Action Summary, Form PTO-326, of the first office action is page 1 of that action, and the written pages run sequentially therefrom, the page titled "DETAILED ACTION" being page two. The written action ends with the primary examiner's signature on page 10.

Amendments

20 The amendments to the specification have been entered.
The amendments to the drawings have been entered.
The amendments to the claims have been entered

Objections to Specification and Drawings

25 The objection to the specification is withdrawn in response to the amendments.

Examiner's objections to the drawings are withdrawn in response to the amendments. The draftsperson's objections remain. New formal drawings will be required reflecting the drawing amendments and changes required by Draftsperson when the case is allowed.

30 **Claim Objections Under 35 USC § 112**

The objection to claims 92 and 93 as being substantial duplicates is withdrawn in response to the cancellation by amendment of those claims.

35 **Claim Rejections Under 35 USC § 112**

The rejection of claims 108-112 under this section of U.S. Code is withdrawn in response to the amendment of claim 108 correcting the antecedent basis error.

Claim Rejections Under 35 USC § 102

40 The rejections of claims 1, 3, 4, 47, 49, 50, 94, and 98 under 35 U.S.C. 102(b) as being anticipated by Barton ('997) are withdrawn in response to the amendment canceling claims 4, 50, 94 and 98 and incorporating the subject matter of formerly dependent claims into independent claims 1 and 47.

Claim Rejections Under 35 USC § 103

Withdrawn:

The rejections of claims 17, 42-45, 63, 88-91, 95-97, and 99-107 under 35 U.S.C. 103(a) as being unpatentable over Barton ('997) in view of Applied Cryptography, by Bruce Schneier are withdrawn in response to the canceling of those claims by amendment.

The rejections of claims 46, 92, and 93 under 35 U.S.C. 103(a) as being unpatentable over Barton ('997) in view of Applied Cryptography, by Bruce Schneier, and further in view of Conner et al. ('393), are withdrawn in response to the canceling of those claims by amendment.

Rejected:

All rejections of dependent claims necessarily incorporate the grounds of rejection applied to the independent claim and any intervening claims.

Claims 1-3, 5-16, 18-26, 33-37, 47-49, 51-62, 64-72, and 79-83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barton ('997) in view of Applied Cryptography, by Bruce Schneier.

Claims 1, 3, 47, and 49:

Barton discloses in column 4, lines 15-20, embedding a digital signature of digital data into that data by inserting the signature into predetermined bit positions of the digital data. In column 6, lines 62-65, Barton discloses excluding the predetermined bits from the signature, citing that they will change when the signature is inserted into those bits. The invention of Barton is suitable for signing digital audio, video, and image data (col. 1 line 5).

Barton also discloses in column 3, lines 23-30, 45-51 and 58-61, that additional data associated with the digital data, such as a serial number or other identifying information, is also embedded into the digital data and signed. The claim 94 and 98 limitations of receiving data from an external source are also satisfied inherently by Barton. That reference states in column 3, lines 30-47, that embedded authentication data may identify the owner of the digital data. A computer program/apparatus that performs the method could not by its nature know the identity of the owner of the digital data. Therefore, that information would have to be supplied by an external source.

In column 7, lines 1-5 Barton discloses that additional data indicating the signature calculation technique may be added to the data to be embedded, but does not specifically disclose inclusion of data identifying a public key. Since the signing method disclosed in the applied Schneier reference uses a public/private key signing technique, it would be obvious to include identification of the public key in the field mentioned by Barton so that the recipient/verifier could more easily verify the signature.

Claims 2, 5-16, 18-26, 33-37, 48, 51-62, 64-72, and 79-83:

The rejections of these claims have not changed since the first action and are maintained as they were previously presented. Those rejections now (necessarily) incorporate the rejection newly applied to base claims, stated directly above.

Claims 27-32 and 73-78 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Barton in view of Schneier, as applied above, and further in view of Conner et al. ('393). The grounds of rejection presented in the first office action are maintained, and further incorporate the new application of the references to independent claims 1 and 47 above.

Claims 38-41, 84-87, and 108-116 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Barton in view of Schneier, as applied above, and further in view of Bramall ('101). The grounds of rejection presented in the first office action are maintained, and further incorporate the new application of the references to independent claims 1 and 47 above.

Rejections of Newly Added Claims:

All rejections of dependent claims necessarily incorporate the grounds of rejection applied to the independent claim and any intervening claims.

Claims 117-121, 124-128, and 130-133 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barton, as applied above, and further in view of Applied Cryptography, by Bruce Schneier. The combination of Barton in view of Schneier is made as above.

Claim 117 is rejected on the same grounds as claim 22 above.

Claim 118 is rejected on the same grounds as claim 23 above.

Claim 119 is rejected on the same grounds as claim 24 above.

Claim 120 is rejected on the same grounds as claim 26 above.

Claim 121 is rejected on the same grounds as claim 36 above.

Claim 124 is rejected on the same grounds as claim 68 above.

Claim 125 is rejected on the same grounds as claim 69 above.

Claim 126 is rejected on the same grounds as claim 70 above.

Claim 127 is rejected on the same grounds as claim 72 above.

Claim 128 is rejected on the same grounds as claim 82 above.

Claim 130 is rejected on the same grounds as claim 95 of the previous office action.

Claim 131 is rejected on the same grounds as claim 96 of the previous office action. Claim 132 is rejected on the same grounds as claim 99 of the previous office action.

Claim 133 is rejected on the same grounds as claim 100 of the previous office action.

Claims 122, 123, 129, and 134 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barton in view of Schneier, as applied above, and further in view of Bramall ('101).

Claim 122 is rejected on the same grounds as claim 38 above.

Claim 123 is rejected on the same grounds as claim 40 above.

Claim 129 is rejected on the same grounds as claim 86 above.

Claim 134 is rejected on the same grounds as claim 114 above.

This concludes the claim rejections. All claims stand rejected under 35 U.S.C. 103(a) over various combinations of Barton, Schneier, and Conner or Bramall. For the newly added claims, reference has been made to prior grounds of rejection in view of Applicant's admission that the new claims are combinations of previously presented (and rejected) claims.

Response to Remarks

Formal matters concerning objections to the specification, drawings, and claims and rejections of claims under 35 USC §112 have been resolved above.

- 5 With regards to the traverse presented by Applicant pertaining to the subject matter of claims 17, 22-24, 26, 36, 38, 40, 63, 68-70, 72, 82, 86, 95, 96, 99, 100, 108, 112, and 114 (of which claims 4, 17, 63, 95, 96, 99, and 100 have been incorporated into independent claims and appropriately cancelled), Examiner respectfully does not find those arguments to be effective in overcoming the original rejection. Examiner acknowledges that the independent claims have been amended
- 10 to include the subject matter of former dependent and intervening claims. However, since all claims were rejected in the first office action, those rejections must be overcome. To this end, applicant has stated that the allegedly patentable features are not taught or suggested by the cited prior art references.
- 15 Specifically, the subject matter of former claims 17 and 63 (which is now incorporated into independent claims 1 and 47, respectively, along with corresponding intervening claims 4 and 50) specifies the limitation of adding data indicative of a public key needed to decrypt the signature to the associated data. Examiner addressed this subject matter on page 6, lines 11-16 of the previous office action, and this argument is maintained and applied to amended claims 1
- 20 and 47, as is the argument presented on page 3, lines 43+, addressing the subject matter of the intervening claims. The feature of adding public key data to the associated data is maintained to be obvious to apply to Barton in view of Schneier, since Barton already discloses adding information relevant to the signing technique to the associated data.
- 25 The more specific limitations provided by claims 22-24 and 68-70 (which remain presented as dependent claims) are also maintained to be unpatentable under the originally presented obviousness rejection. This rejection, presented on page 6, lines 29-35 of the first action, contends that the inclusion of multiple fields, one identifying a public key and another identifying a signature is obvious when Barton is considered in combination with Schneier. That
- 30 position is maintained.
In response to Applicant's statement that the cited references do not teach the use of GPS, radio, or Internet transmissions as external data sources, examiner took official notice that these were all well known methods of receiving external data. The rejection, based on the obviousness of using these methods to the person of ordinary skill in the combination of references, is
- 35 maintained.
- Referencing the arguments applied to claims 36 and 82, in which time stamping is performed by a trusted third party through the internet, examiner presented arguments in paper no. 3 on page 7, lines 12-22, as to why this limitation would be obvious to the person of ordinary skill in network
- 40 security. These reasons, as well as the rejection, are maintained.
- In regards to Applicant's statement that none of the cited references teach recognizing a user whose identity is stored in memory and inserting that identifier in associated data (claims 38 and 108), examiner respectfully disagrees. To the contrary, the Bramall reference was cited
- 45 specifically to show this feature, and motivation to include that feature in Barton was provided. The rejection is maintained. The issue of using fingerprint identification (claims 40, 86, and

114) was also addressed by the examiner. Official notice was taken that fingerprint recognition is a well-known identification method under the general heading of biometrics. Motivation to include this feature in the combination of references was provided, citing the known advantages of biometric identification. For these reasons, the rejections are maintained.

For at least these reasons, the rejections traversed by Applicant are maintained by examiner. Accordingly, the rejections formerly applied to the remaining dependent claims are still considered valid, since Applicant's traverse of those rejections depended on the patentability of the base/intervening claims. The original grounds for rejection have been applied to the newly presented claims, reconfigured as necessary, since those claims are merely combinations of originally filed independent and dependent claims which were already considered and addressed in the first action. The claim amendments did not add any new substance to the claims—only reorganizations of the originally claimed subject matter. Consequently, all pending claims stand rejected.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony DiLorenzo, whose telephone number is (703) 306-5617. The examiner can normally be reached on Monday-Friday from 9:00 a.m. to 5:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gail Hayes, can be reached at (703) 305-9711. The official fax phone number for the organization where this application or proceeding is assigned is (703) 308-9051. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Anthony DiLorenzo
August 2, 2000

AD
8/7/00



GAIL O. HAYES
SUPERVISORY PATENT EXAMINER
GROUP 2700